Ministry of
Northern Development
and Mines

Ontario

Sean Conway, Minister of Mines

ONTARIO GEOLOGICAL SURVEY

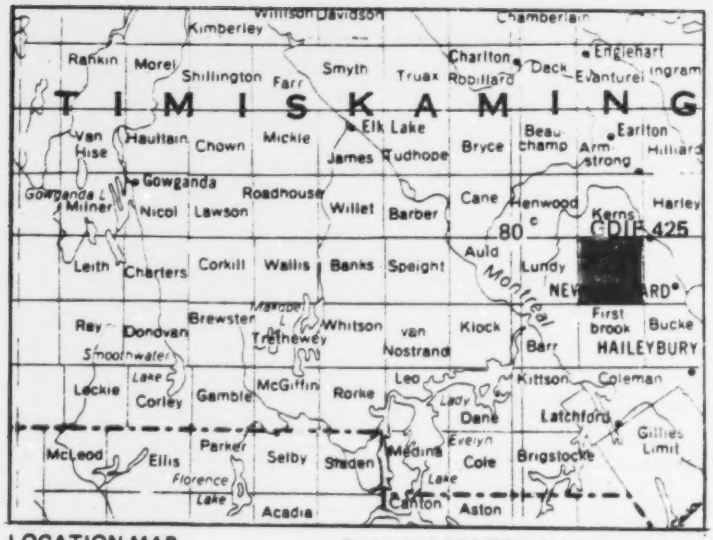
GEOLOGICAL DATA INVENTORY FOLIO

GDIF 425

HUDSON TOWNSHIP

DISTRICT OF TIMISKAMING

Compiled by the Staff of
the Resident Geologist's Office
Cobalt



LOCATION MAP

Scale: 1:1 013 760 or 1 inch=16 miles

88-02302/

NTS Number 31M/12 and part of 31M/5

Mining Claim Map Number M-508

The project is part of the Canada-Ontario Mineral Development Agreement (COMDA).

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Geological Survey does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey
1988 : Hudson Township, District of Timiskaming, Ontario Geological Survey Geological Data Inventory Folio 425 , compiled by the staff of the Resident Geologist's Office, Cobalt, 25 pages and 2 Maps.

Original Compilation by: Patricia Anderson, July 2, 1987

Date	Page Revised	Revised by

Date	Page Revised	Revised by

HUDSON TOWNSHIP

TABLE OF CONTENTS

Data Sources Checklist 1
Metals and Minerals Reference List 2
Mineral Occurrences 3
Type of Work 4
Drill Hole Summary 6
Airborne Geophysical Survey Data 8
Geochemical Survey Data 9
Miscellaneous Data 10
Newspaper Clipping File 11
ODM General Index Search 12
Selected References 16
Notes and Addenda 24

ACCOMPANYING MAPS

Property Location Map - 1 Map
Exploration Data Map - 1 Map
Map Scale 1: 31 680 or 1 inch to ½ mile

CONVERSION FACTORS FOR MEASUREMENTS IN ONTARIO GEOLOGICAL SURVEY PUBLICATIONS

If the reader wishes to convert imperial units to SI (metric) units or SI units to imperial units the following multipliers should be used:

CONVERSION FROM SI TO IMPERIAL			CONVERSION FROM IMPERIAL TO SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
			LENGTH		
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
			AREA		
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
			VOLUME		
1 cm^3	0.061 02	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	0.764 555	m^3
			CAPACITY		
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
			MASS		
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 908 8**	t
			CONCENTRATION		
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy)/ton (short)	20.0	pennyweights/ton (short)
1 pennyweight/ton (short)	0.05	ounce (troy)/ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

NOTE–Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries published by The Mining Association of Canada in co-operation with the Coal Association of Canada.

DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no'; if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	Yes	D.P.A.
2	Assessment Files Research Office, Toronto	No	D.P.A.
3	ODM General Index; 9 volumes	Yes	D.P.A.
4	Catalogue of Airborne Geophysical Surveys (ODM)	No	D.P.A.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	Yes	D.P.A.
6	ODM Industrial Mineral Reports	No	D.P.A.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	Yes	D.P.A.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	No	D.P.A.
9	Newspaper Clippings File	No	D.P.A.
10	GSC Index to Publications	Yes	D.P.A.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	Yes	D.P.A.
12	OGS Index Maps	Yes	D.P.A.
13	Source Mineral Deposit Records (O.G.S.)	Yes	D.P.A.
14	Author - Subject Articles File	No	D.P.A.
15	Miscellaneous Papers: ODM & OGS	Yes	D.P.A.
16	ODM Geological Circulars: OGS Study Series	No	D.P.A.
17	ODM Preliminary Reports: ODM Bulletins	No	D.P.A.
18	ODM – OGS Open File Reports	Yes	D.P.A.
19	OGS Northern Ontario Engineering Geology Terrain Studies	Yes	D.P.A.
20	OGS Aggregate Resources Inventory Papers	N.A.	D.P.A.
21	OGS Mineral Potential Maps	No	D.P.A.
22	Theses on File, Cobalt	No	D.P.A.
23	Aerial Photographs on File, Toronto	Yes	D.P.A.
24	Aerial Photographs on File, Cobalt	Yes	D.P.A.

HUDSON TOWNSHIP

METALS AND MINERALS REFERENCES LIST

△ anh	Anhydrite	△ fu	Fuchsite	▲ Ni	Nickel	△ st	Stone
△ ank	Ankerite	▲ gn	Galena	△ Nb	Niobium	▲ talc	Talc
△ anna	Annabergite	△ gt	Garnet	△ Pd	Palladium	△ Te	Tellurium
△ ap	Apatite	△ goe	Goethite	△ peat	Peat	△ td	Tetrahedrite
▲ arg	Argentite	▲ Au	Gold	△ pent	Pentlandite	△ th	Thorite
△ As	Arsenic	△ gf	Graphite	△ Pt	Platinum	△ Th	Thorium
△ asp	Arsenopyrite	△ gl	Gravel	▲ py	Pyrite	△ thuc	Thucholite
△ asb	Asbestos	△ gyp	Gypsum	△ pyl	Pyrochlore	△ ti	Titanite
△ ba	Barite	▲ hem	Hematite	△ pyrl	Pyrolusite	△ Ti	Titanium
△ be	Beryl	△ il	Ilmenite	▲ po	Pyrrhotite	△ tour	Tourmaline
△ Bi	Bismuth	△ Fe	Iron	△ q	Quartz	△ trap	Trap rock
△ bn	Bornite	△ IF	Iron Formation	△ qcv	Quartz carbonate vein	△ W	Tungsten
△ bran	Brannerite	▲ jas	Jasper	△ ra	Radioactive minerals	△ uran	Uraninite
△ bruc	Brucite	△ kaol	Kaolinite (kaolin)	△ RE	Rare Earths	▲ U	Uranium
△ Cd	Cadmium	△ ky	Kyanite	△ sd	Sand	△ verm	Vermiculite
△ calc	Calcite	△ Pb	Lead	△ sgl	Sand and gravel	△ Y	Yttrium
△ carb	Carbonate	△ lim	Limonite	△ ss	Sandstone	△ Zn	Zinc
△ cel	Celestite	△ Li	Lithium	△ scap	Scapolite	△ zr	Zircon
△ cc	Chalcocite	△ mgst	Magnesite	△ shee	Scheelite		
▲ cp	Chalcopyrite	△ mag	Magnetite	△ serp	Serpentine		
▲ ch	Chert	▲ mc	Malachite	△ sh	Shale		
△ clay	Clay	△ Mn	Manganese	△ sid	Siderite		
▲ Co	Cobalt	△ mb	Marble	△ si	Silica		
△ cob	Cobaltite	△ mar	Marcasite	▲ Ag	Silver		
△ cb	Columbite	△ ma	Marl	△ sl	Slate		
▲ Cu	Copper	▲ mi	Mica	△ sm	Smaltite		
△ cor	Corundum	△ ml	Millerite	△ sod	Sodalite		
△ dol	Dolomite	△ mo	Molybdenite	△ spec	Specularite		
△ ep	Epidote	△ Mo	Molybdenum	▲ sp	Sphalerite		
△ ery	Erythrite	△ mon	Monazite	△ spd	Spodumene		
△ fel	Feldspar	△ ne	Nephelite (nepheline)	△ staur	Staurolite		
△ fl	Fluorite (flurospar)	△ nc	Niccolite	△ stib	Stibnite		

Solid triangles indicate metal and mineral occurrences shown on the accompanying maps. or listed in Drillhole Summary.

MINERAL OCCURRENCES

Map Ref. Letter	Name(s)	Mineralization	Source Mineral Deposit Record	References in OGS Mineral Deposits Circulars & OGS Industrial Mineral Reports	Additional References and/or Remarks
A.	Colebucke	Ag-Major	T-0259		OGS, 1976, GR 144, pp.23-24 OGS, 1974, Map 2300, Kerns & Hudson Township Hudson Township AF Colebucke Mines Ltd.
B.	Milberta Creek	Cu-Major Ni, Co-Minor	T-0261		OGS, 1976, GR 144, p.24 OGS, 1974, Map 2300, Kerns & Hudson Township
C.	Spencer, W.A. (Hammerstrom, W.)	U-Major Cu-Minor	T-0258	NMI- 31M/12, U1, Cu1 MRC9, pp.91-92 MDC 25, p.136 MDC 12, p.378 SMI #000326	OGS, 1966, MP5, pp.38-39 OGS, 1972, Map p.786-Marginal Notes OGS, 1974, Map 2300, Kerns & Hudson Township OGS, 1977, MP 71, p.77-94 Hudson Township AF. Spencer, W.A. Armstrong, Ray Hammerstrom, W.
D.	Lot 2, Conc. 1	cp, mc minor			OGS, 1972, Map p.786

GDIF FORM NO. 1

TYPE OF WORK		Numbers below represent the year in which the work was done;e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE COBALT	COMPANY/AUTHOR (file number)	GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY			
1	Big Six Mr. Pitts & Mr. McCosh (1906) Hudson Twp. AF, R. Thomson's Notes			?				50 ?												
2	Armstrong, Roy			69 72 74																
3	Colebucke Mines Ltd.	49			49	49							49							
4	Lindquist, E.			69																
5	Spencer, W.A. 1949 Hudson, Lundy, Kerns & Henwood Township			49	49[1]	50 ?														
6	McRae Hudson Twp. AF, Thomsons Notes						14- 18?	61												
7	Scott, William P. (1985)																			

GDIF FORM NO. 2

further data available.

HUDSON TOWNSHIP

TYPE OF WORK		Numbers below represent the year in which the work was done;e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE COBALT	COMPANY/AUTHOR (file number)	GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY			
8	Pollock, John William (1985)					85														
9	Hammerstrom, W.	66				66														

GDIF FORM NO. 2

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth DEGREE	Initial Dip of Hole DEGREE	Thickness of Overburden FEET	Total Length of Hole FEET	Mineralization Noted in Log	Assay Data Included for
1a	Colebucke Mines Ltd.	CX-1	1949	130	-45	3	33	py, ch	Ag, Co
b		CX-2	1949	175	-25	3.5	18.7	cp, py	Au, Ag
c		CX-3	1949	130	-60	3	35.1	py, mi, arg	Ag
d		CX-4	1949	175	-45	11	40.8	cp, py, po	Au, Ag
e		CX-5							
f		CX-6	1949	175	-45	4.3	74.7	cp, po, py	Au, Ag
g		CX-7	1949	180	-45	2.2	80.5		Ag
h		MX-8	1949	204	-44	3	118.5	py, cp, talc	Ag
i		MX-9	1949	044	-39	5.5	88.7	jas, cp, py, talc, hem	Au, Ag
j		MX-10	1949	180	-40	2.5	84		Au, Ag
2a	Colebucke Mines Ltd.	MX-11	1949		-45	1.5	26	sp	Ag
b		MX-12	1949	045	-45	1.5	127.7	gn, py, chert cp, hem, talc	Au, Ag
3	Colebucke Mines Ltd.	MX-13	1949	170	-45	3.5	116.8	py	Ag

GDIF FORM NO. 3

HUDSON TOWNSHIP

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth DEGREE	Initial Dip of Hole DEGREE	Thickness of Overburden FEET	Total Length of Hole FEET	Mineralization Noted in Log	Assay Data Included for
4a	Colebucke Mines Ltd.	MX-14	1949	325	-34	5.5	146.4	ZnS, cp, py	Ag
b		MX-15	1949	325	-45	5.5	74.7	ZnS, py, gn, cp, po	Au, Ag
c		MX-16	1949	325	-45	3	89.5	py, ZnS	
d		MX-17	1949	145	-44	2.5	51.5	gn, ZnS, cp, po	Ag
e		MX-18	1949	325	-43	4		po, ZnS, cp, gn, po	Ag

GDIF FORM NO. 3

AIRBORNE GEOPHYSICAL SURVEY DATA

No.	By For	Type of Survey	Flight Altitude	Flight Line Direction	Flight Line Spacing
	No data available as of July 2, 1987				

GDIF FORM NO. 4

HUDSON TOWNSHIP

GEOCHEMICAL SURVEY DATA

Map Sample Site Reference Number	Type of Survey	Analysis For	By	Reference
	No data available as of July 2, 1987			

GDIF FORM NO. 5

MISCELLANEOUS DATA

AGE DATING

Site	Method	Material	Reference	Result
	No data available as of July 2, 1987			

LANDSAT COLOUR PHOTO NTS 31/M

LS	TR	FR	Date of Imagery	Band	Cycle/Day
2	20	27	13/10/81	C_1	136/10

On File in Cobalt Office

GDIF FORM NO. 6

NEWSPAPER CLIPPINGS FILE

NOTE: A file of newspaper clippings about the companies listed below, who have worked in this area, is maintained in the Regional/Resident Geologist's Office.

No data available as of July 2, 1987

HUDSON TOWNSHIP

ODM GENERAL INDEX SEARCH

Words searched: Armstrong, Roy; Bix Six Mine; Colebucke Mines Ltd.; Hammond Lake; Hillview; Hudfir Lake; Hudson Township; Lindquist, E.; McCosh, Donald J.; McRae; Milberta Creek; Pitts, Mr.; Spencer, W.A.; Twin Lake

Index Volume	Listing:	Report Volume	Part	Page
1	Hudson Twp., Timiskaming			
	Conglomerate	*14	2	46
	Iron	*14	2	30
		*16	2	31
		*19	2	58
	Malachite	*16	1	54
	Minerals	*15	1	44
	Niccolite	*14	2	51
	Soil W. of, agricultural	*N.O.[1]		90
	McCosh, Donald J.	*15	1	44
2	Hudson Twp., Timiskaming			
	Diabase	*31	3	7,8
	See also map 31b with	*31	3	
	Twin Lake, Hudson & Firstbrook Twp.			
	Rocks, See map 31b with	*31	3	
3	Colebucke Mines Ltd.			
	Incorporated	57	1	46
8	Hudson, Dymond, Kerns & Harley Twp., Timiskaming District			
	Summary of Field Work, 1970, by H.L.Lovell	MP 43		80-81
	Hudson Twp., Timiskaming District			
	Copper	MP 5		38
	Uranium	MP 5		38-39
		MRC 9		91-92
	Spencer, W. Occurrence Hudson Twp., Timiskaming District Mining property, report on	MRC 9		91-92
	Spencer, W.A. Hudson Twp., Timiskaming District	MP 5		38

GDIF FORM NO. 8

ODM GENERAL INDEX SEARCH

Words searched:

Index Volume	Listing:	Report Volume	Part	Page
	Spencer Copper Occurrence			
	Hudson Twp., Timiskaming District			
	Mining Property, Report on	MP 5		38
	Spencer Uranium Occurrence			
	Hudson Twp., Timiskaming Diatrict			
	Mining Property, Report on	MP 5		38-39
9	Colebucke Mines Ltd.			
	Hudson Twp., Timiskaming District	GR 144		23-24
	Report on Property			
	Hammond Lake			
	See Twin Lakes			
	Hudson Twp., Timiskaming District			
	Geology of The New Lisdeard Area	GR 144		
	Silver/Copper	GR 144		24
	Uranium	MP 71		85
	Lindquist Occurrence			
	Hudson Twp., Timiskaming District	GR 144		24
	Report on Property			
	Milberta Creek Occurence			
	Hudson Twp., Timiskaming District			
	Report on Property	GR 144		24
	Spencer, W.A.			
	Hudson Twp., Timiskaming District	GR 144		24
	Spencer Occurrence			
	Hudson Twp., Timiskaming District			
	Report on Property	GR 144		24

GDIF FORM NO. 8

ODM GENERAL INDEX SEARCH

Words searched:

Index Volume	Listing:	Report Volume	Part	Page
	Twin Lakes			
	Hudson Twp., Timiskaming District	GR 144		15,17
	*Out of Print			
	1. N.O. - Report of the Survey and Exploration of Northern Ontario, 1900.			

GDIF FORM NO. 8

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		REGIONAL GEOLOGICAL COMPILATION MAPS		
Ginn, R.M.	1964	Timmins-Kirkland Lake Sheet, Cochrane, Sudbury, Timiskaming District Ontario, Geological Compilation Series	ODM Map 2046	1:253 440
Card, K.D. et al	1971	Sudbury-Cobalt Sheet, Geological Compiliation Series, Algoma, Manitoulin, Nipissing, Parry Sound, Sudbury & Timiskaming Districts, Ontario	ODMNA Map 2188	1:253 440
Pyke, D.R., Ayres, L.D., Innes, D.G.	1973	Timmins- Kirkland Lake Geological Compilation Series, Cochrane,Sudbury and Timiskaming District, Ontario	OGS Map 2205	1:253 440
MERQ-OGS	1984	Lithostratigraphic Map of the Abitibi Subprovince	OGS Map 2484	1:500 000
Easton, R.M.	1986	Geochronology Compilation Map for Ontario: Sheet 3: East Central Ontario, All Isotopic Systems	OGS Map p.2842	1:1 013 760
		GEOPHYSICAL MAPS		
	1965	Cobalt, Ontario-Quebec, NTS 31M/5	GSC Map 1492G	1:63 360
	1965	New Liskeard, Ontario-Quebec NTS 31M/12	GSC Map 1493G	1:63 360
	1978	Airborne Gamma-Ray Spectrometry Maps and Profiles	OGS Maps p.80411-80425	1:250 000
Gupta, V.K., Wadge, D.R.	1980	Bouger Gravity and Generalized Geological Map, Temagami-Englehart Area, Districts of Timiskaming, Nipissing and Sudbury	OGS P.2296	1:100 000

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		GEOPHYSICAL MAPS		
Gupta, V.K., Grant, F.S., Boud, A.	1981	A Gravity Study in North-Central Ontario, Districts of Sudbury, Nipissing and Timiskaming; in Summary of Field Work, 1981, edited by J. Wood et al, Ontario Geological Survey	OGS MP 100	No.26 pp.160-164
	1981	Magnetic Anomoly Map, Timiskaming-Kapuskasing Region	GSC Map 1563A	1:1 000 000
Gupta, V.K.	1982	Gravity and Aeromagnetic Studies in North-Central Ontario: A Progress Report; in Summary of Field Work, 1982, edited by J. Wood et al, Ontario Geological Survey	OGS MP 106	No.24 pp.165-167
Mansinha, L. Wilkinson, D.A.	1983	Interpretation of Gravity Data from New Liskeard, Ontario; Ontario Geoscience Research Grant Program, Grant No.109	OGS OFR 5440	
GSC	1984	Sudbury, Ontario and Quebec, IMW NL 16/17, Magnetic Anomaly Map	GSC Map NL16/17 M	1:1 000 000
Gupta, V.K.	1985	Cobalt Embayment Interpretation: Depth to Basement and Distribution of Nipissing Diabase from Aeromagnetics; in Summary of Field Work and other Activities, 1985, Ontario Geological Survey, edited by John Wood, Owen L. White, R.B. Barlow and A.C. Colvine	OGS MP 126	p.178-181
		Aeromagnetic Map	GSC Map 70756	1:253 440
		Earth Physics Branch Gravity Map Series	EPB Maps No.84, 134	1:500 000

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		SURFICIAL, PLEISTOCENE, TERRAIN, ENGINEERING		
	1951	New Liskeard Ontario, topographic	NTS 31M/NW	1:126 720
	1951	Haileybury, Ontario, topographic	NTS 31M/SW	1:126 720
	1956	Cobalt	NTS 31M/5, 31M/SE, 31M/SW	1:50 000
	1976	Ville-Marie, Quebec-Ontario, topographic	NTS 31M	1:250 000
Roed, M.A., Hallett, D.R.,	1979	New Liskeard, NTS 31M/NW	NOEGTS 84	
	1979	Data Base Map	OGS Map 5021	1:100 000
	1980	NOEGTS Sand & Gravel Resident Map	OGS Map 5025	1:100 000
Vincent, J.S ., Hardy, L.	1979	The Evolution of Glacial Lakes Barlow and Ojibway, Quebec and Ontario	GSC Bulletin 316	
	1979	New Liskeard Quaternary	ODM Map P.2291	1:50 000
Morton, J.D., King, R.C.F.	1979	Quaternary Geology, New Liskeard Area, NTS 31M/12, Timiskaming District, Ontario	OGS Map P.2291	1:50 000
	1982	Ontario Basic Maps	OBM Maps 20 17 5800 52600 20 17 5900 52600	1:20 000
	1983	New Liskeard, Ontario, topographic	NTS 31M/12	1:50 000
		Hudson Township Claim Maps	MNR Plan No. M-508	1"=40 Ch.
		MINERAL POTENTIAL		
Reid, J.A.	1943	Mineral Resources of the Timiskaming Silver-Cobalt Area, Ontario	ODM Bulletin 134	

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		MINERAL POTENTIAL		
Springer, J.	1977	Ontario Mineral Potential Map, Gogama Sheet and part of Ville Marie Sheet, District of Sudbury and Timiskaming	OGS Map p.1514	1:250 000
		GEOCHEMICAL		
Boyle, R.W.	1966	Geochemical prospecting research in 1966, Cobalt Area, Ontario	GSC Paper 66-46	15p.
Boyle, R.W. et al	1969	Research in Geochemical Prospecting Methods for Native Silver Deposits, Cobalt Area, Ontario, 1966	GSC Paper 67-35	91p.
Hornbrook, E.H.W.	1972	Geochemical and Biogeochemcial Exploration Methods of Research in the Cobalt Area, Ontario	GSC Paper 71-32	45p.
Dillon-Leitch, H.	1980	Alteration and Mineralization in Archean Volcanic Rocks of the Cobalt Area; in Summary of Field Work, 1980, edited by V.G. Milne et al, Ontario Geological Survey	OGS MP 96	No. S25 pp.191-194
		GEOLOGICAL REPORTS AND MAPS		
Barlow, A.E.	1899	Report on the Geology and Natural Resources of the Area included by the Nipissing and Timiskaming Map Sheets, Comprising Portions of the District of Nipissing Ontario and the County of Pontiac, Quebec	*GSC Annual Report X, Pt.I *GSC Map 599	
Bell, R.	1906	The Cobalt Mining District, Ontario	*GSC Summary Report, 1905	pp.94-105

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		GEOLOGICAL REPORTS AND MAPS		
Bell, R.	1907	Cobalt District and Northward	*GSC Summary Report, 1906	pp.110-112
Parks, W.A.	1908	The Geology of a District from Lake Timiskaming Northward	*GSC Annual Report, 1904, Volume XVI,pt.A	pp.198-225
Barlow, A.E.	1908	Second Edition of a Report on the Geology and Natural Resources of the Area Included by the Nipissing and Timiskaming Map Sheets	*GSC Separate Report 962	
			*GSC Map 944	1:63 360
Brock, R.W.	1909	The Huronian Conglomerate of the Cobalt District	*GSC Summary Report, 1908	pp. 12-13
Burrows, A.G., Knight, C.W.	1913	Map of Sudbury-Cobalt-Porcupine Region, Ontario	OBM Map 22h	1:506 880
Burrow, A.G., Hopkins, P.E.	1922	Blanche River Area, Timiskaming District, Ontario	*ODM AR 31,pt.3	
Burrow, A.G., Hopkins, P.E.	1922	Blanche River Area, Timiskaming District, Ontario	*ODM Map 31b	1:63 360
Savage, W.S., Thomson, R., Kenwick, K.G.	1962	Elk Lake-New Liskeard Sheet, District of Timiskaming, Ontario	ODM Map P. 159	1:126 720
Roscoe, S.M.	1969	Huronian Rocks and Uraniferous Conglomerates in the Canadian Shield	GSC Paper 68-40	205p.
Lovell, H.L., Caine, T.W.	1970	Lake Timiskaming Rift Valley, Ontario	ODM MP 39	
Bolton, T.E., Copeland, M.J.	1972	Paleozoic Formations and Silurian Biostratigraphy, Lake Timiskaming Region, Ontario and Quebec	GSC Paper 72-15	pp.1-49

GDIF FORM NO.9

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Author	Date	Title	Reference	Map Scales and/or Report Pages
		GEOLOGICAL REPORTS AND MAPS		
Lovell, H.L., Frey, E.D., Caine, T.W.	1972	Hudson Township, Timiskaming District, Ontario	ODM Map P786	1:15 840
Lovell, H.L., Frey, E.D.	1972	Geology of the New Liskeard Area Timiskaming District, Ontario	ODM OFR 5083	
Lovell, H.L., Frey, E.D.	1974	Kerns & Hudson Townships, Timiskaming District, Ontario	ODM Map P2300	1:31 680
Lovell, H.L., Frey, E.D.	1976	Geology of the New Liskeard Area, NTS 31M/5+12, Timiskaming Districts, Ontario	ODM Geoscience Report 144	
Wood, J.	1979	Regional Geology of the Cobalt Embayment, Districts of Sudbury, Nipissing and Timiskaming; in Summary of Field Work, 1979, edited by V.G. Milne et al, Ontario Geological Survey	OGS MP 90	No. S18 pp.79-81
Johns, G.W.	1980	Geology of the Firstbrook Lake Area, NTS 31M/5NW, Timiskaming District, Ontario	OGS OFR 5303	
Wood, J.	1980	Regional Geology of the Cobalt Embayment, Districts of Sudbury, Nipissing & Timiskaming; in Summary of Field Work, 1980, edited by V.G. Milne et al, Ontario	OGS MP 96	No.14 pp.61-63
Carter, M.W.	1981	Shining Tree Area, Districts of Sudbury & Timiskaming	OGS OFR 5346	67p.
Colvine, A.C.	1981	Reconnaissance of the Lorrain Formation, Northern Cobalt Embayment; in Summary of Field Work, 1981, edited by J. Wood et al, Ontario Geological Survey.	OGS MP 100	67p.

GDIF FORM NO.9

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Author	Date	Title	Reference	Map Scales and/or Report Pages
		GEOLOGICAL REPORTS AND MAPS		
Russell, D.J.	1981	The Geology of the Paleozoic Outliers on the Canadian Shield; in Summary of Field Work, 1981, edited by J. Wood et al, Ontario Geological Survey	OGS MP 100	No.23 pp.117-120
Donaldson, J.A. et al	1984	Grant No.173, Sedimentary Rocks and Stratabound Mineralization in the Cobalt Region; In Geoscience Research Grant Program, Summary of Research 1983-1984, edited by V.G. Milne, Ontario Geological Survey	OGS MP 121	pp.198-210
Hunter & Association Ltd.	1984	Peat and Peatland Evaluation of the New Liskeard Area	OGS OFR 5486 Volume 1,2,3	
H.G.E. Inc.	1984	Pre-Engineering Feasibility Study Limestone Crushing Facility in Northern Ontario	OGS OFR 5523	40p.
Johns, G.W.	1985	Geology of the Firstbrook and Parts of Surrounding Townships Area, accompanied by	OGS Report 237	58p.
Johns, G.W., Van Steenburgh, R.	1985	Firstbrook and Parts of Surrounding Township, Timiskaming District, Ontario	OGS Map 2474	1:31 680
		JOURNAL ARTICLES, THESES, TECHNICAL REPORTS		
Hume, G.S.	1920	Stratigraphic and Geologic Relations of the Paleozoic Outlier of Lake Timiskaming, Ontario	PHD Thesis, Yale University	
		*Out of Print		

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages

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NOTES AND ADDENDA

The exploration data map shows only the most important minerals found at each site. All the minerals noted are listed in the mineral occurences or the drill hole data.

On the maps, only areas for which work has been submitted to the Ministry are shown and thus a company may hold, or have held in the past, more ground than is shown.

No. present producers.

AIR PHOTOS - on file in Toronto

Only 1977 photos are available for viewing at the Public Service Centre, Rm.1640, Whitney Block.

Photos can also be ordered from here for the years 1946, 1958, and 1970.

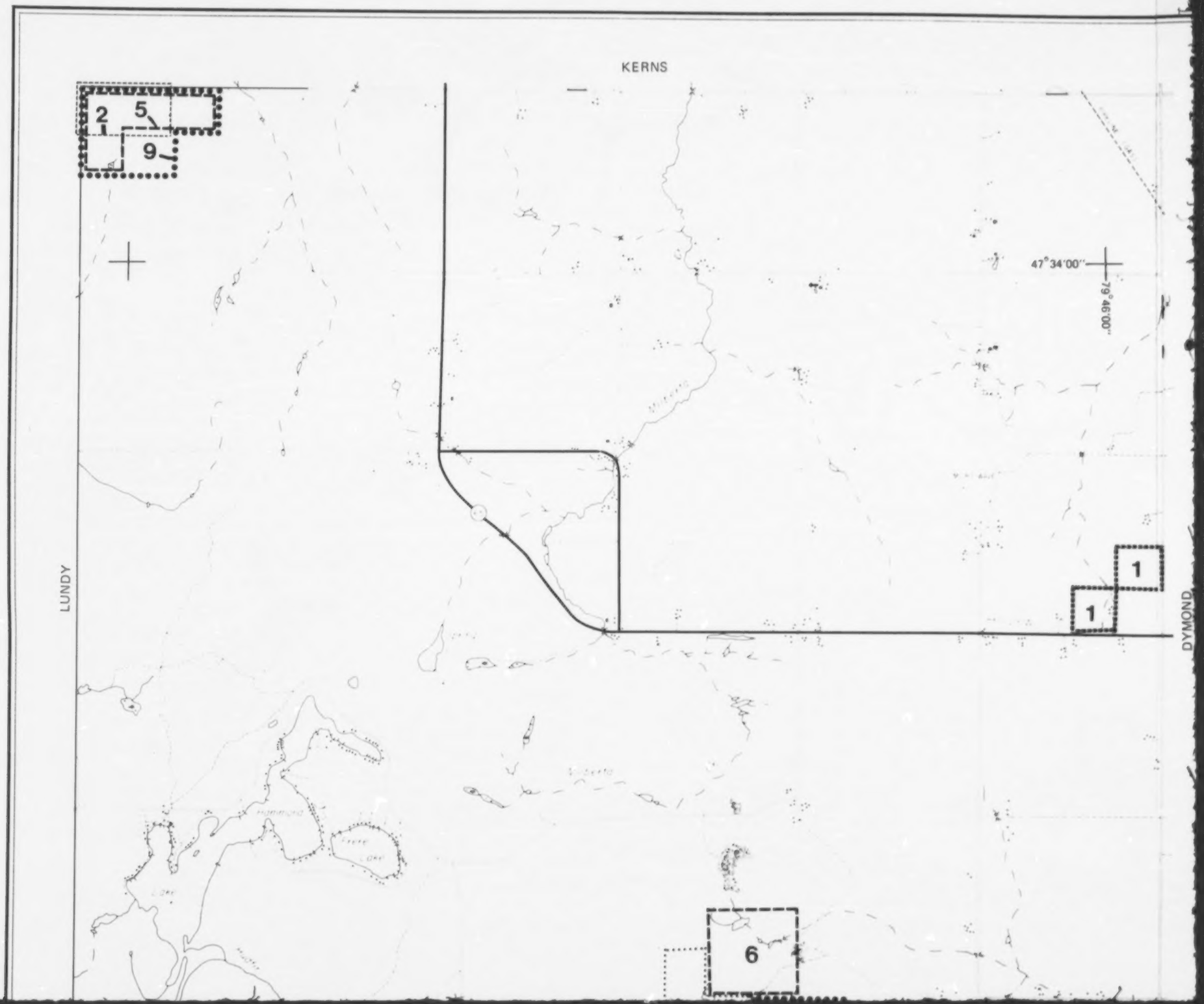
Year	Roll	Strip	Photo
1946	208	107	113-119
	208	108	111-117
	208	109	109-115
	219	110	16-24
	208	110	20-27
	206	111	45-51
1958	17	4721	281-288
1959	21	4722	99-106
	20	4721	153-159
	20	4720	175-181
1970	25	4724	100-107
	23	4723	189-195
	44	4723	169-175
	23	4722	163-169
	44	4721	202-210
1977	1	4724	101-108
	45	4723	106-112
	45	4722	66-74
	45	4721	22-29
1978	14	4725	22-29
	14	4724	67-74
	14	4723	112-119
	07	4722	23-30

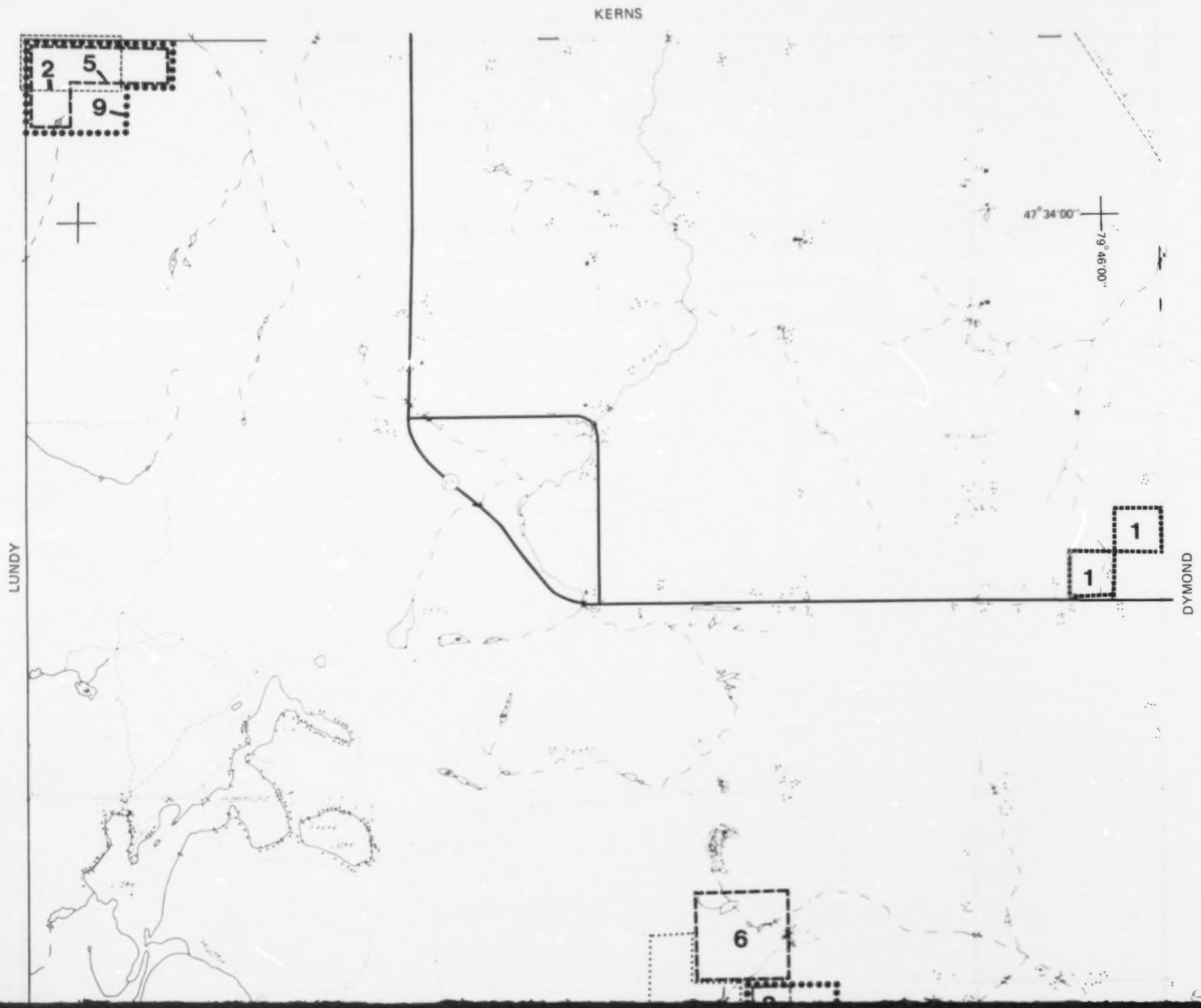
Air Photos on file in Cobalt, on next page.

NOTES AND ADDENDA

AIR PHOTOS - on file in Cobalt

Year	Roll	Strip	Photo
1946	208	108	112-116
	208	109	111-115
	219	109-110	18-23
	208	110	20-26
	206	111	45-50
1959	20	4720	74-80
	20	4721	152-158
1958R	121	4721	281-287
1959	21	4722	99-105


KERNS
2
5
9
47°34'00"
79°46'00"
1
1
LUNDY
DYMOND
6



Ministry of Northern Development and Mines

Ontario

Sean Conway, Minister of Mines

ONTARIO GEOLOGICAL SURVEY

PROPERTY LOCATION MAP

GEOLOGICAL DATA INVENTORY FOLIO 425

(Map 1 of 2)

HUDSON TOWNSHIP

DISTRICT OF TIMISKAMING

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

EXPLORATION DATA FILE AREAS

47°34'00"
79°46'00"
LUNDY
1
1
6
8
7
4
3
79°53'00"
47°30'00"
FIRSTBROOK

GEOLOGICAL DATA INVENTORY FOLIO 425

(Map 1 of 2)

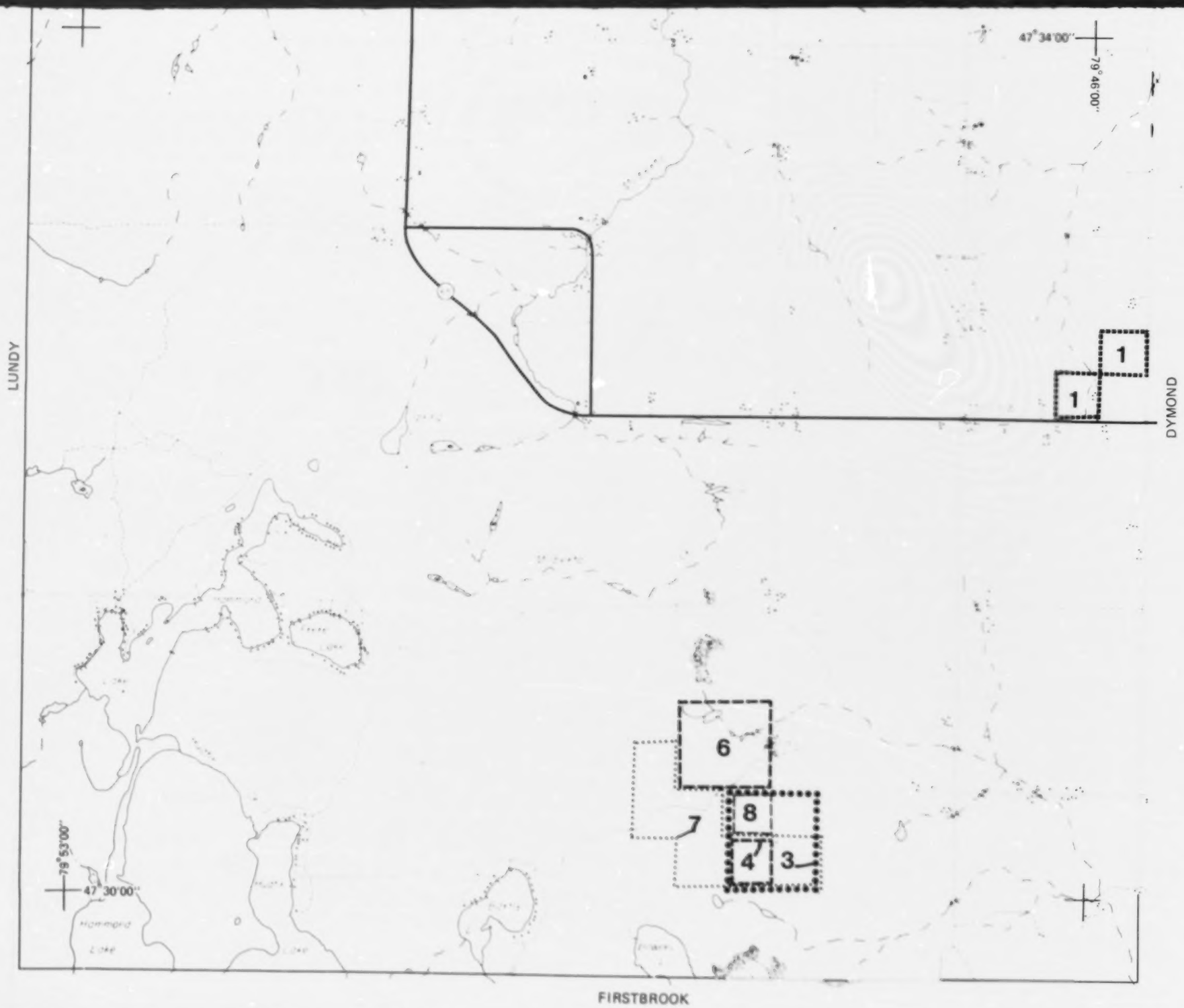
HUDSON TOWNSHIP

DISTRICT OF TIMISKAMING

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile



EXPLORATION DATA FILE AREAS

■ ① ⑥ Reference number is always inside work area outlined. See listing in text pages.

□ x ④ Small area exploration.

TYPES OF DATA SHOWN ON THIS MAP

GEOCHEMICAL AND GEOCHRONOLOGICAL DATA

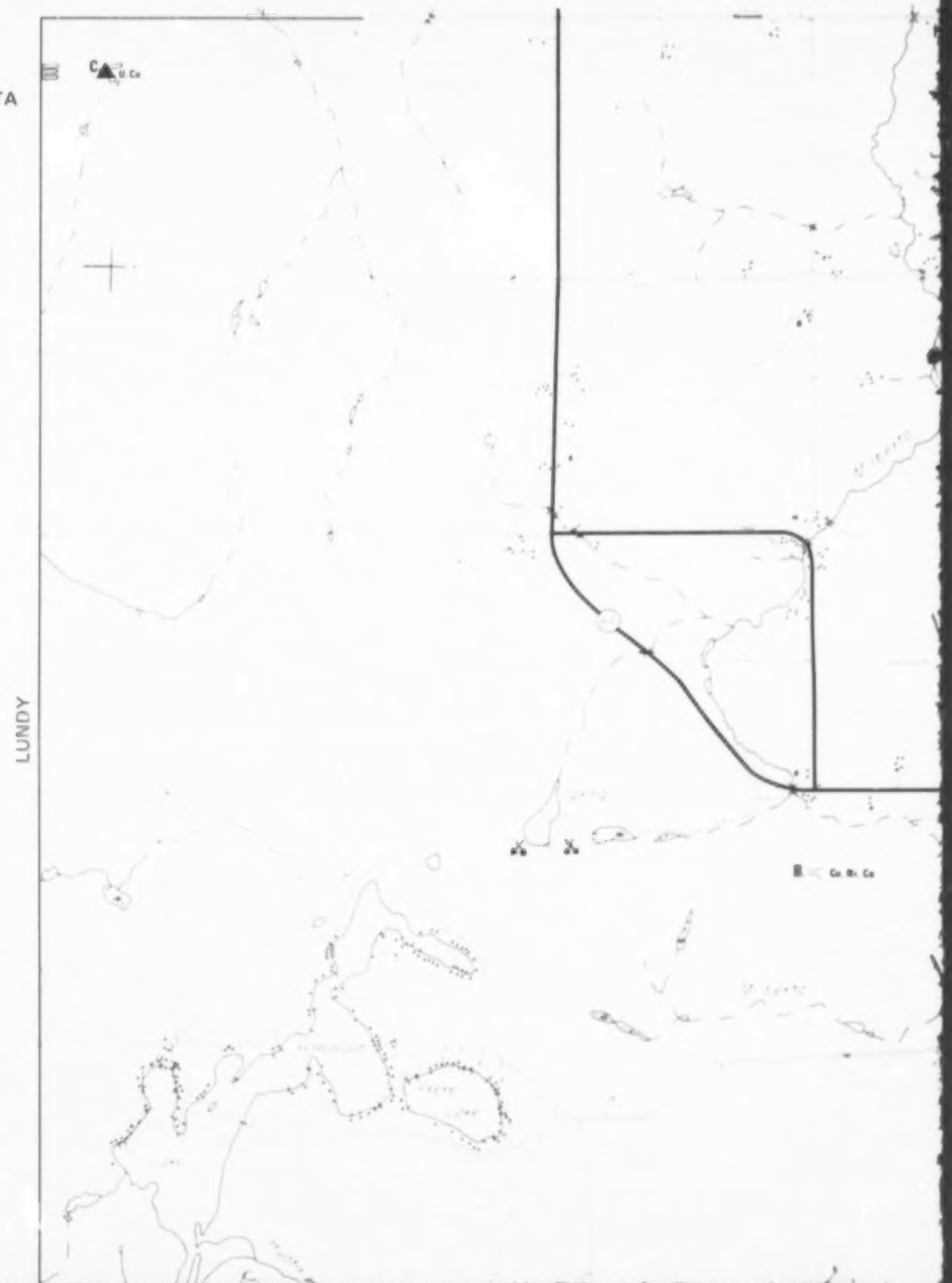
- Geochemical sample site, with reference number
- Area of geochemical sampling, with reference number
- Age dating material sampling site, with reference number

GEOPHYSICAL ANOMALIES

- AM — Airborne magnetic anomaly
- Airborne electromagnetic anomaly Length of anomaly along flight line
- Airborne electromagnetic anomaly Location of anomaly along flight line
- Airborne electromagnetic anomaly Conductor axis: definite, probable, possible
- ARA — Airborne radiometric anomaly
- M — Ground magnetic anomaly
- VL — Ground electromagnetic anomaly (VL - Vertical loop; HL - Horizontal loop; VLF - Very low freq; Turam; JEM - Crone Em - 16)
- RA — Ground radiometric anomaly
- IP — Induced polarization anomaly
- SP — Self potential anomaly
- AFMAG — Audio-frequency magnetic anomaly (total intensity)
- R — Resistivity anomaly
- GR — Gravity anomaly

MISCELLANEOUS DATA

- Trenching pit
- Rock quarry



Ministry of Northern Development and Mines

Ontario

Sean Conway, Minister of Mines

ONTARIO GEOLOGICAL SURVEY

EXPLORATION DATA MAP

GEOLOGICAL DATA INVENTORY FOLIO 425

(Map 2 of 2)

HUDSON TOWNSHIP

DISTRICT OF TIMISKAMING

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

GEOLOGICAL AND MINING SYMBOLS

TYPES OF DATA SHOWN ON THIS MAP

MINERAL OCCURRENCES

- cp A. — Mineral occurrence at surface, with reference letter
- Au A. 84' — Mineral occurrence with shaft, depth given with reference letter
- Ag A. — Mineral occurrence reported but exact location uncertain, with reference letter
- cp A. — Mineralized float with reference letter

DRILLHOLE

- 2 — Location of single drillhole, with reference number
- 2 — Location of closely spaced group of drillholes, with reference number
- ? 2 — Drillhole, exact location uncertain, with reference number

Age dating material sampling site, with reference number

GEOPHYSICAL ANOMALIES

- AM — Airborne magnetic anomaly
- Airborne electromagnetic anomaly
  Length of anomaly along flight line
- Airborne electromagnetic anomaly
  Location of anomaly along flight line
- Airborne electromagnetic anomaly
  Conductor axis: definite, probable, possible
- ARA — Airborne radiometric anomaly
- M — Ground magnetic anomaly
- VL — Ground electromagnetic anomaly
  (VL - Vertical loop; HL - Horizontal loop; VLF - Very low freq; Turam; JEM - Crone Em - 16)
- RA — Ground radiometric anomaly
- IP — Induced polarization anomaly
- SP — Self potential anomaly
- AFMAG — Audio-frequency magnetic anomaly (total intensity)
- R — Resistivity anomaly
- GR — Gravity anomaly

MISCELLANEOUS DATA

- Trenching, pit
- Rock quarry
- Adit
- Sand and/or gravel pit
- Open pit

NOTE: Consult the text that accompanies this map for pertinent lists of data, references, and abbreviations.

LUNDY

FIRSTBR

EXPLORATION DATA MAP

GEOLOGICAL DATA INVENTORY FOLIO 425

(Map 2 of 2)

HUDSON TOWNSHIP

DISTRICT OF TIMISKAMING

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

GEOLOGICAL AND MINING SYMBOLS

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- □ Ag A. — Mineral occurrence reported but exact location uncertain, with reference letter
- □ cp A. — Mineralized float with reference letter

DRILLHOLE

- ■ 2 — Location of single drillhole, with reference number
- ■ 2 — Location of closely spaced group of drillholes, with reference number
- □ 2 — Drillhole, exact location uncertain, with reference number
- □ — Property with underground drillholes in this general area, with reference number
- □ 2 — Property with drillholes which have not been plotted on map, with reference number
- □ 2 — Reverse circulation drillhole; churn drilling, with reference number